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in the following listed application(s) or patent(s) for which the issue fee has been paid.

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(12) **United States Patent**
Kumaki et al.

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(54) **LIGHT-EMITTING ELEMENT AND
LIGHT-EMITTING DEVICE**

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(58) Field of Classification Search **257/40,**
257/13, E39.007
See application file for complete search history.

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(57) **ABSTRACT**

It is an object of the present invention to provide a light-emitting element having a layer containing a light-emitting material and a transparent conductive film between a pair of electrodes, in which electric erosion of the transparent conductive film and metal can be prevented, and also to provide a light-emitting device using the light-emitting element. According to one feature of the invention, a light-emitting element includes a first layer **102** containing a light-emitting material, a second layer **103** containing a material having a donor level, a third layer **104** including a transparent conductive film, and a fourth layer **105** containing a hole-transporting medium between a first electrode **101** and a second electrode **106**, in which the first layer **102**, the second layer **103**, the third layer **104**, the fourth layer **105**, and the second electrode **106** are provided sequentially, in which the second electrode **106** has a layer containing metal.

18 Claims, 10 Drawing Sheets

